

Cross-Cutting Issues

Michael May

Tom Isaacs

November 14, 2003

LLNL Livermore

Underlying Points

- The "margin of security" under the world's current non-proliferation regime "is becoming too slim for comfort" (El Baradei, October 16, 2003)
- Countries will have different rationales for developing nuclear power
- There is a will to cooperate to minimize terrorist risks but
- On that and everything else, money and priority are at issue

Four Kinds of Cross-Cutting Issues

- Materials Control
- Monitoring
- Governance
- Reducing nuclear weapons demand

Materials Control: Specific Measures

- Fulfil G-8 pledges
- Continue US programs (Threat Prevention Program, HEU buyback)
- Phase out HEU for civilian reactors (RERTR program)
- Implement protocol on physical security on weapons-usable material

These were generally agreed to in principle.

Yet...

- G8 pledges have yet to materialize into concrete action
- Present US programs are insufficiently funded
- Surplus and poorly secured nuclear weapons materials are the most dangerous security problem
- For a few hundred million dollars, many thousands worth of nuclear weapon material could be denatured or at least better secured

Materials Control: Departures from Present System

- Minimize accumulation of weapons-usable material
- Establish internationally available nuclear materials storage site(s)
- Transfer enrichment/separation facilities control and ownership to international authority

There is some agreement to at least the first two measures in principle

Yet...

- There is agreement that excess separated civilian nuclear materials suitable for weapons should be kept as low as possible, **BUT** serious disagreement on the proper path to achieve this goal.
- There is growing consensus on the ultimate need for and value of regional/international control and facilities for materials management and disposal, **BUT** disagreement on the extent of control and the timing of such programs.

And...

- Some would like to see a new distinction made between states that will have access to full fuel cycle facilities and others that should have access to (proliferation-resistant) reactors alone. Others believe Article IV allows and, in fact, requires the full dissemination of civilian applications and expertise, albeit with full scope safeguards.
- The once through fuel cycle v. reprocessing recycle debate continues. Yet, the primary issue is not whether we recycle or not, but how do we get to a nuclear future that secures present and future weapons usable materials and facilities.

Suggested Improvements to Monitoring Facilities

- Add to intelligence resources monitoring all nuclear-related transfers
- Implement INFCIRC 540 as high priority first step
- Allow sensitive exports only to states complying with 540
- “Solving the problem of verifying the absence of undeclared nuclear facilities requires tools that can give high evidence of detecting the presence of such facilities.” (David Donohue)

Some agreement in principle, slow implementation 9

Governance Steps Generally Agreed in Principle

- Better define NPT violation and what justifies inspections
- P5/UNSC to agree on steps to be taken after a violation
- UNSC to make illicit NW material trade into international violation
- US to appoint Presidential representative to push above initiatives

But...

- There are questions regarding both what constitutes a clear NPT violation and how to ensure that predictable, effective, and rapid enforcement will follow. There seems to be agreement that both need priority clarification to deal with the problem states, **BUT** seemingly different views on how close to a weapons capability a country can come before it is cause for action.

El Baradei's Recommendations

- Restrict processing and production of weapon-usable material exclusively to facilities under multinational control.
- Deploy nuclear-energy systems that avoid the use of materials that may be applied directly to making nuclear weapons.
- Consider multinational approaches to management and disposal of spent fuel and radioactive waste.

All This Won't Be Enough

- Would-be proliferators don't need the Nuclear Suppliers Group nor the P-5
- Pakistan, Iran, North Korea formed an independent nuclear and missile technology supply ring. Others can follow.
- The foregoing measures are necessary but not sufficient to assure security

Reducing NW Demand 1

- Supply cannot be completely prevented without cooperation from some of the very regimes that today cause concern
- Extend and clarify security assurances and basis for extending them

Reducing NW Demand 2

- Continue to place high priority on breaking any links between NW capabilities and terrorist groups
- Exercise US leadership in reducing NW and reliance on them: the USNPR contradicts the rest of US counter WMD policy

Some Closing Thoughts

- Nuclear civilian uses will expand whether or not security is put first: roughly 2000 Gwe new power will be needed in Asia alone the next fifty years
- Clear and consistent U.S. leadership is essential
- But sustained international security and stability requires international willingness
- A new AFP program is needed with the same persistence and priority as the first one